What is claimed is:

1. A stator coil including sequentially-connected conductor segments for an electric rotary machine, comprising:

a plurality of conductor segments accommodated in a slot of a stator core having an even number of conductor accommodation positions serially aligned in the radial direction, said conductor segments being sequentially connected to cooperatively constitute one turn of a phase coil of an M-phase (M is an integer not smaller than 3) armature coil,

each of said conductor segments having a pair of in-slot conductor portions separately accommodated into the conductor accommodation positions of two different slots mutually spaced by a predetermined pitch, a head conductor portion continuously extending from said in-slot conductor portions and protruding from one end of said stator core so as to constitute a head side coil end, and a pair of tail conductor portions continuously extending from said in-slot conductor portions and protruding from the other end of said stator so as to constitute a tail side coil end,

said head conductor portion having a U-shaped head top portion, and a pair of head slanting portions extending obliquely in both circumferential and axial directions from said head top portion and respectively connected to said in-slot conductor portions,

said tail conductor portions having a pair of tail slanting portions extending obliquely in both circumferential and axial directions from said pair of in-slot conductor portions, and tail joint portions formed at distal ends of said tail slanting portions and bonded to tail conductor portions of other conductor segment,

said head side coil end including a plurality of said head conductor portions serially disposed in the radial direction when seen from the circumferential direction, and

said tail side coil end including a plurality of said tail conductor

portions serially disposed in the radial direction when seen from the circumferential direction,

wherein

said conductor segments include a small-turning conductor segment inserted into a pair of said conductor accommodation positions disposed next to each other in the radial direction, and a large-turning conductor segment inserted into another pair of said conductor accommodation positions respectively disposed next to said pair of conductor accommodation positions in the radial direction,

the tail joint portion of said large-turning conductor segment is bonded to the tail joint portion of the small-turning conductor segment located adjacently in the radial direction,

the tail slanting portion of said large-turning conductor segment or said small-turning conductor segment has a swerved portion which bends toward a direction departing from the opposed conductor segment so as to expand a radial clearance between said large-turning conductor segment and said small-turning conductor segment at a crossing portion of the tail slanting portion of said large-turning conductor segment and the tail slanting portion of said small-turning conductor segment which are adjacently disposed in the radial direction.

2. The stator coil including sequentially-connected conductor segments for an electric rotary machine in accordance with claim 1, wherein

a plurality of conductor segment sets, each consisting of said large-turning conductor segment and said small-turning conductor segment, are disposed in the radial direction, and

a gap between a pair of conductor segment sets disposed next to each other in the radial direction and a gap between a pair of small-turning conductor segments disposed next to each other in the radial direction are widened in the vicinity of said tail joint portions compared with the gaps in

the vicinity of an end surface of said stator core.

3. The stator coil including sequentially-connected conductor segments for an electric rotary machine in accordance with claim 2, wherein

a plurality of conductor segment sets each being constituted by the small-turning conductor segment and the large-turning conductor segment are disposed in the radial direction, said small-turning conductor segment including a small-turning head portion continuously formed with a pair of said in-slot conductor portions accommodated separately into a pair of said conductor accommodation positions disposed next to each other in the radial direction, and said large-turning conductor segment including a large turning head portion straddling in the radial direction so as to surround said small-turning head portion,

a group of said conductor segment sets is located at the same radial position and disposed in the circumferential direction to constitute a partial phase coil to which a predetermined phase voltage is applied, and

said phase coil is constituted by serially connecting a plurality of partial phase coils having different radial positions and disposed sequentially in the radial direction.

4. The stator coil including sequentially-connected conductor segments for an electric rotary machine in accordance with claim 3, wherein

an inphase slot group is constituted by a plurality of said slots adjacently and continuously disposed in the circumferential direction for accommodating in-slot conductor portions to which a same inphase voltage is applied,

a plurality of serial phase coil circuits are accommodated in different slots of the inphase slot group, each serial phase coil circuit including serially connected said partial phase coils accommodated in the same slot and disposed sequentially in the radial direction to have different radial positions,

and

said phase coil is constituted by connecting said plurality of serial phase coil circuits in parallel with each other.

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